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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/198,376 11/24/98 OKAMOTO

A NU-98035

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QM02/0912

EXAMINER

FLANIGAN, A

ART UNIT	PAPER NUMBER
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3743

24

DATE MAILED: 09/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/198,376	OKAMOTO ET AL.
	Examiner	Art Unit
	Allen J. Flanigan	3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 June 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1, 4-6, 11-19, and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1, 4-6, 11-19, and 26-30 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) Interview Summary (PTO-413) Paper No(s) _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4, 11-13, 16, 17, and 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Teeg et al. and Benson et al.

Please see the comments made in regard to the above rejection in the Office action mailed 12/15/1999.

Claims 5, 6, 14, 15, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Teeg et al. and Benson et al. as applied to claims 4, 13, and 17 above, and further in view of Amore.

Please see the comments made in regard to the above rejection in the Office action mailed 12/15/1999.

The declaration submitted on 6/22/01 has been fully considered but is not considered to overcome the *prima facie* finding of obviousness.

The general procedures followed by the Office in considering declarations under 37 CFR 1.132 are set forth in MPEP 716. Although factual evidence is preferable to opinion testimony, "such testimony is entitled to consideration and some weight so long as the opinion is not on the ultimate legal conclusion at issue. While an opinion as to a legal conclusion is not entitled to any weight, the underlying basis for the opinion may be persuasive." Declarations submitted by either the applicant or employees of the assignee, while less

persuasive than that of a disinterested person, cannot be disregarded for this reason alone.

Issued patents such as Benson et al. enjoy a statutory presumption of validity. This presumption extends to a presumption of utility, *i.e.* the device as disclosed and claimed is presumed to be operable. The main thrust of the declaration of Mr. Kubo is to support an issue raised previously by the applicants, *i.e.* that the disclosure of Benson et al. erroneously describes VO₂ as having a positive emissivity variation as a function of temperature. Such a proposition requires the conclusion that, if true, the device disclosed in Benson et al. is inoperable (in that coating 170 cannot act to control heat emission as a function of temperature). According to MPEP 716.07, "Affidavits or declarations attacking the operability of a patent cited as a reference must rebut the presumption of operability by a preponderance of the evidence. In re Sasse, 629 F.2d 675, 207 USPQ 107 (CCPA 1980)." In this case, no new evidence is offered by the declarant; Mr. Kubo in paragraph 9 merely reiterates the reliance on the Neuman et al. paper previously cited. Paragraph 16 cites the Okamoto reference, also of record.

Both references relied upon to overcome the presumption of validity of Benson et al. have been previously considered by the Examiner. The declarant's background as described in paragraphs 2, 3, and 8 does not establish familiarity with the properties of the VO₂ material disclosed in Benson et al. except "as described in the C. H. Neuman et al. paper." Declaration

paragraph 8. With all due respect to the esteemed Mr. Kubo, it appears that his reliance on Neuman et al. to establish the inoperability of Benson et al. is misplaced, as discussed previously in the Advisory Action mailed in December of 2000. Declarant cites, in paragraph 9 for example, Figure 1 of Neuman et al., which clearly labels the ordinate of the graph with the symbol " Ω^{-1} ", which represents electrical conductivity (the inverse of electrical resistivity). Electrical conductivity and thermal conductivity are different properties.

Finally, the fact that an alternative embodiment disclosed and claimed by the applicants, a material which appears to be chemically comparable to Benson's disclosed VO_2 compounds (VO_2 doped with chromium instead of titanium), is disclosed by the applicants as possessing the required temperature dependent emissivity, supports the conclusion that Benson et al.'s description of VO_2 as a substance emitting positive emissivity variation with increased temperature is not erroneous.

Therefore, a full consideration of the opinions expressed in the declaration submitted by Mr. Kubo, weighed against the evidence of obviousness contained in the references of record, necessitates the conclusion that the applicants' burden of overcoming the *prima facie* finding of obviousness has not been met.

This is a CPA of applicant's earlier Application of the same serial No. All claims are drawn to the same invention claimed earlier in the application and could have been finally rejected on the grounds and art of record in the next

Office action if they had been entered earlier in the application. Accordingly, **THIS ACTION IS MADE FINAL** even though it is effectively a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen J. Flanigan whose telephone number is (703) 308-1015. The examiner can normally be reached on M-F 8:40-5:10.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on (703) 308-1935. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7764 for regular communications and (703) 305-3463 for After Final communications.

Art Unit: 3743

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.



Allen J. Flanigan
Primary Examiner
Art Unit 3743

AJF

September 10, 2001